

TABLE 5

PLUTONIUM CONTENT OF BLOOD SAMPLES* FOLLOWING INTRAVENOUS INJECTION OF APPROXIMATELY 5 μg OF PLUTONIUM AS Pu^{+4} -CITRATE

DAYS AFTER INJECTION	PATIENT CODE AND PERCENT OF INJECTED DOSE IN TOTAL BLOOD VOLUME*											AVERAGE
	Hp-1	Hp-2	Hp-3	Hp-4	Hp-5	Hp-6	Hp-7	Hp-8	Hp-9	Hp-10	Hp-12	
1/6	46.02	-	28.32	83.31	31.51	36.70	32.57	37.64	40.83	51.57	5.31	65.4
1	21.83	19.35	-	-	6.23	10.97	16.40	14.51	12.39	24.66	-	15.7
2	-	8.38	11.56	-	-	-	-	-	-	-	-	9.97
3	-	10.03	-	16.64	1.16	2.94	6.97	4.94	6.22	20.06	-	6.62
4	-	-	4.22	-	-	-	-	-	-	-	-	4.9
5	-	-	-	-	0.66	-	-	-	-	-	-	-
6	3.30	4.25	2.17	6.14	-	1.00	2.96	2.07	3.91	4.91	-	3.4
8	-	2.32	1.42	-	-	-	-	-	-	-	-	1.9
9	-	-	-	4.60	-	-	-	-	-	-	-	-
10	1.42	-	-	-	0.39	0.38	1.13	1.37	2.21	1.72	-	1.2
13	-	-	0.61	2.34	-	-	-	-	-	-	-	1.5
15	-	-	-	-	0.11	0.26	0.66	0.71	1.42	1.02	-	.70
17	-	-	0.51	1.45	-	-	-	-	-	-	-	1.0
22	-	0.70	-	-	0.18	0.25	-	-	-	-	-	.36
23	-	-	0.25	0.72	-	-	-	-	-	-	-	.48
29	-	-	-	-	-	-	0.37	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	0.36	-	-
31	-	-	-	-	-	-	-	-	-	-	0.51	-
36	-	-	-	-	-	-	-	-	0.42	-	-	-
42	-	-	-	-	-	-	-	0.17	-	-	-	-
46	-	-	-	-	-	-	-	-	-	-	0.45	-

*Total Weight of Blood Taken as 7.7% of Total Body Weight.

C. Excretion of Plutonium

1. Urinary Excretion

The urinary excretion of plutonium was studied in eleven of the subjects following the intravenous injection of approximately 5 μg of plutonium as Pu^{+4} in 0.4 per cent solution of sodium citrate $\cdot 2\text{H}_2\text{O}$. With the exception of the first day, urine from all subjects was collected in 24 hour samples through 22 days post injection. After 22 days the collection of 24 hour urine samples was continued as long as the patients were available for study. It was not possible to retain the subjects as long as was desired and the major weakness in these results is the short time interval over which the studies were continued. Two subjects were followed 22 days, one for 23 days, one for 27, and the remainder for 29 days or longer after injection. The Chicago cases (13) were followed for 13, 140, and 186 days and the California case (14) was followed for a period of 341 days. Because of the great importance of measurements at longer time intervals, the Chicago and California data have been incorporated with

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